

TANK TYPE Diaphragm	MOUNT Flange	LOCATION Girth
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This is a 40-inch oblate spheroid pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by fully reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the mid-plane. Mounting is accomplished on a continuous flange parallel with and adjacent to the mid-plane.

Part Number 80263-1

SIZE: 40.2" ID x 31.8" LONG Oblate Spheroid
SIZE: 1021 mm ID x 808 mm LONG

ISO 9001 (1994) REGISTERED

PSI Analysis	Stress	Fracture
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APPLICABLE DOCUMENTS	
Acceptance Test Procedure	50-000205
QTP Supplemental	50-000209
QTP Supplemental	50-000224
Burst Test Procedure	50-000327
Qualification Test Report	56-000075
Qual Test Report, Supplemental	56-000082
Burst Test Report	56-000120
Traceability	60-000042
Engineering Data Report	60-000129
Quality Assurance Program Plan	60-000234
Configuration Management Plan	60-000265
Powder Blast	65-000030
Manufacturing Flow Plan	80S263500
Fusion Welding, TIG	90-000003
Radiographic Acceptance STD	90-000004
Radiographic Inspection	90-000006
Pre-Weld Cleaning	90-000022
Identification	90-000047
Electrochemical Etch	90-000049
Heat Treat	90-000082
Closed Die Forging	90-000083
Penetrant Inspection, Note 6	90-000086
Pre-Penetrant Etch, Note 6	90-000088
Radiographic, Note 6	90-000103
Cleaning	CPP 3511

TANK CHARACTERISTICS			
Operating Pressure, psig	338	Total Volume, ci	28,144
Proof Pressure, psig	574	Prop Volume, ci	Various
Cryo Proof, psig	NA	Max Design Wt, lbs	76.0
Burst Pressure, psig	676	Minimum Wall, inch	0.050

ACCEPTANCE ENVIRONMENTAL TESTS
None

TANK CHARACTERISTICS (Metrics)			
Operating Pressure, Bar	23.30	Total Volume, l	461.2
Proof Pressure, Bar	39.58	Prop Volume, l	Various
Cryo Proof, Bar	NA	Max Design Wt, Kg	34.5
Burst Pressure, Bar	46.61	Minimum Wall, MM	1.270

PROGRAM INFORMATION	
Program	Note 5
Customer	TRW
Customer P/N	C419129-1
Original Job No	7707
Customer Installed Device	No
Customer Controlled Design	No

DIAPHRAGM INFORMATION	
Diaphragm P/N	80-263007-1
Diaphragm Mold P/N	T-1868
Diaphragm Gross Wt	7.6 (3.44 Kg)
Diaphragm Matl Type	AF-E-332
Material Spec, Rubber	MT3-73
Diaphragm Processing, Note 2	90-000094
N-Ray Inspection Procedure	1002

FORGINGS		
FORGINGS P/N	SUPPLIER	Die No
80-260061-1 (2)	ARCTURUS	3241
RING FORGING		
RING SIZE (Rough Machined)		
80-263065-1, Retainer	40.46 +.09 OD x 39.12 -.09 ID x 1.68 +.09 Lg	
80-263063-1, Cylinder	42.57 +.09 OD x 39.56 -.09 ID x 3.81 +.25 Lg	

TUBE TYPE AND SIZE	
TRANSITION	SIZE
80-263001-1, (2)	.250 OD x .016 wall (6.35 x .406 MM)

Notes:

- 1: Tooling owned by Northrop Grumman
- 2: Proprietary Document
- 3: Launch vehicle is Shuttle/IUS
- 4: The only difference between the dash 1 and the dash 101 is that the dash 101 does not get leak tests
- 5: Tracking Data Relay Satellite System
- 6: Fracture Critical

